

ABSTRACT OF THE DISCLOSURE

The invention relates to polynucleotides for DNA vaccination which polynucleotides encode an HIV envelope protein or fragment or immunogenic derivative, which is non-glycosylated when expressed in a mammalian target cell, operably linked to a heterologous promoter. Preferably the HIV envelope molecule, such as gp120 or gp140 or gp160, lacks a functional secretion signal. It may be fused to additional HIV proteins such as Nef, Gag, RT or Tat.